Curriculum Vitae

Name	Giorgia Foggetti, Ph.D.
Current Position	Project Leader
Department	Medical Oncology Department – Experimental Oncology Division
Organization	Vita-Salute San Raffaele University (UniSR) – IRCCS Ospedale San Raffaele (OSR), Milan, Italy
E-mail	foggetti.giorgia@hsr.it; giorgia.foggetti@yale.edu
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Education

2012 – 2015	**Ph.D.** in Genetics, curriculum: Oncological Genetics and Biology of Differentiation, University of Genoa, Genoa, Italy
2011	Italian Professional license in Biology
2009 – 2011	**Master's Degree** in Cellular and Molecular Biology, University of Genoa, Genoa, Italy. *Final grade 110 cum laude* and *right of publication*
2006 – 2009	**Bachelor's Degree** in Cellular and Molecular Biology, University of Genoa, Genoa, Italy. *Final grade 110 cum laude*

Research and Professional Experience

Jul 2023 – Present	**Project Leader,** Experimental Oncology Division, OSR, Milan, Italy
Dec 2021 – Present	**Principal Investigator (PI)**, Medical Oncology Department, OSR – UniSR, Milan, Italy
July 2021 – Present	**Sponsored Identity**, Yale Cancer Center (YCC), Yale School of Medicine, New Haven, CT, USA
July 2022 – Nov 2022	**Visiting Research Faculty**, YCC, Yale School of Medicine, New Haven, CT, USA
Sept 2021 – Aug 2022	**European Respiratory Society (ERS) Long-Term Research Fellow**, Medical Oncology Department, OSR, Milan, Italy
Jan 2021 – Jun 2021	**Associate Research Scientist**, Laboratory of Prof. Katerina Politi, Medical Oncology and Pathology Departments, YCC, Yale School of Medicine, New Haven, CT, USA
Jul 2016 – Dec 2020	**Postdoctoral Associate**, Laboratory of Prof. Katerina Politi, Medical Oncology and Pathology Departments, YCC, Yale School of Medicine, New Haven, CT, USA
Apr 2015 – Jun 2016	**Researcher**, Mutagenesis and Cancer Prevention Unit, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
Jan 2012 – Apr 2015	**Ph.D. Student** in Genetics, Mutagenesis and Cancer Prevention Unit, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
Sep 2009 – Apr 2011	**Master's Student**, Mutagenesis and Cancer Prevention Unit, IRCCS Ospedale Policlinico San Martino, Genoa, Italy
Jan 2009 – Apr 2009	**Undergraduate Student**, Mutagenesis and Cancer Prevention Unit**,** IRCCS Ospedale Policlinico San Martino, Genoa, Italy

Grants, Awards, and IRB Approved Studies

Jan 2022 – Present	**Italian Association for Cancer Research (AIRC) Start-Up Grant** (5 years): '*Genomic Mediators of Therapeutic Response in EGFR-Driven Lung Cancer'.* Role: PI
Dec 2021 – Present	**Lung Cancer Research Foundation (LCRF) – AstraZeneca Research Grant Award** (2 years): *'Dissecting the Role of the KEAP1 Pathway in Mediating Therapeutic Sensitivity in EGFR-Driven Lung Adenocarcinoma'.* Role: PI
Mar 2023 – Present	***Mediators of Therapeutic Response in EGFR-Driven Lung Cancer***, IACUC protocol to perform *in vivo* work related to ongoing projects in the laboratory. Role: PI

Oct 2022 – Present ***Genomic Mediators of Therapeutic Response in EGFR-Driven Lung Cancer* (Acronym: *GINGER*)**, observational monocentric study 'to generate patient-derived models of EGFR mutant lung cancer. Role: PI; co-PI: Dr. Alessandra Bulotta; Sponsor: UniSR – OSR, Milan, Italy

Aug 2022 – Present ***Lung Cancer Tissue Collection* (Acronym: *LCTC*)**, observational monocentric study to establish a lung cancer biobank at OSR. Role: PI; co-PI: Dr. Alessandra Bulotta and Prof. Giulia Veronesi; Sponsor: UniSR – OSR, Milan, Italy

Peer-reviewed Publications (Past 5 years)

1. Venanzi FM et al. (2023). *Sex dimorphism and cancer immunotherapy: may pregnancy solve the puzzle?* Cancer Treat Rev. PMID: 37918169
2. Blair LM et al. (2023). *Oncogenic context shapes the fitness landscape of tumor suppression in lung cancer.* Nature Comm. PMID: 37828026
3. Stockhammer P et al. (2023). *Co-occurring alterations in multiple tumor suppressor genes are associated with worse outcomes in patients with EGFR-mutant lung cancer.* J Thorac Oncol. PMID: 37806385
4. Expósito F et al. (2023) *PTEN loss confers resistance to anti-PD-1 therapy in NSCLC by increasing tumor infiltration of T regulatory cells*. Cancer Research. PMID: 37311042
5. Monti P et al. (2022). *Mutant p53K120R expression enables a partial capacity to modulate metabolism*. Frontiers in Genetics. PMID: 36226181
6. **Foggetti G**[#] et al. (2022). *Tumor suppressor pathways shape EGFR-driven lung tumor progression and response to treatment.* Mol Cell Oncol. PMID: 35252550
7. **Foggetti G***, Li C*, Cai H* et al. (2021). *Genetic determinants of EGFR-driven lung cancer growth and therapeutic response in vivo.* Cancer Discov. PMID: 33707235
8. Arnal-Estapé A*, **Foggetti G*** et al (2021). *Preclinical models for the study of lung cancer pathogenesis and therapy development*. Cold Spring Harb Perspect Med. PMID: 34518338
9. Monti P et al. (2019). *P63 modulates the expression of the WDFY2 gene which is implicated in cancer regulation and limb development*. Biosci Rep. PMID: 31789342
10. **Foggetti G** et al. (2019). *Autophagy induced by SAHA affects mutant p53 degradation and cancer cell survival*. Biosci Rep. PMID: 30745455

[#]Corresponding author; *These authors contributed equally to this work

Full Bibliography at this link

Invited Speaking Engagements, Presentations, Symposia & Workshops

2023 AIRC Start-Up Meeting 2023, Hotel Rafael, Milan, Italy

2023 Seminar (Host: Prof. Giorgio Scita), IFOM, Milan, Italy

2022 Seminar (Host: Prof. Alberto Inga) at the Department of Cellular, Computational, and Integrative Biology (CIBIO), University of Trento, Trento, Italy

2022 AIRC Start-Up Meeting 2022, IRCCS Humanitas Research Center, Milan, Italy

2022 Seminar (Host: Prof. Alfonso Calvo) at Center for Applied Medical Research (CIMA), University of Navarra, Pamplona, Spain

2022 Presentation in the '*Back To Italy To Lead Your Laboratory' session of the 'New York Career Day: Opportunities for Italian Researchers'* organized by the Weill Cornell, Memorial Sloan Kettering Cancer Center & The Rockefeller University (virtual), New York, NY, USA

2021 Presentation at the 'Lkb1/Keap1 Day Symposium' organized by Profs. Marina Garassino, Everett Vokes, and Brandon Faubert, University of Chicago (virtual), Chicago, IL, USA

2021 3-minute Presentation at the 'ERS MeetUp' organized by ERS (virtual), Lausanne, Switzerland

2021 Presentation at the 'International *EGFR*-Driven Lung Cancer Meeting' (virtual)

2020 Seminar at the Experimental Oncological Division (virtual), OSR, Milan, Italy

Peer-Reviewed Presentations at International and National Meetings (Selected)

Guzzeloni V, Valci S, Bartolucci A, Nuccio A, Ogliari FR, Pedica F, Muriana P, Novellis P, Cangi MG, Arrigoni G, Veronesi G, Bulotta A and **Foggetti G.** ACC Congress 2023, Genoa, Italy. Poster Presentation by Virginia Guzzeloni

Do Carmo M, Expósito F, Robles-Oteiza C, Cai H, Guzzeloni V, Pedica F, Arrigoni G, Doglioni C, Bulotta A, Cascinu S, Veronesi G, Negri G, Winslow MM, Politi K and **Foggetti G**. *Determinants of Therapeutic Sensitivity in EGFR-Driven Lung Cancer*. ERS Congress 2023, Milan, Italy. Oral Presentation

Guzzeloni V, Pedica F, Muriana P, Cangi MG, Nuccio A, Ogliari FR, Damiano G, Brioschi E, Arrigoni G, Russo V, Bianchini G, Doglioni C, De Cobelli F, Negri G, Cascinu S, Veronesi G, Bulotta A, and **Foggetti G**. *Patient-derived organoids to identify novel therapeutic targets in EGFR-driven lung adenocarcinoma.* EACR Congress 2023, Turin, Italy. Poster Presentation by Virginia Guzzeloni

Guzzeloni V, Pedica F, Muriana P, Cangi MG, Nuccio A, Ogliari FR, Damiano G, Brioschi E, Arrigoni G, Russo V, Bianchini G, Doglioni C, De Cobelli F, Negri G, Cascinu S, Veronesi G, Bulotta A, and **Foggetti G**. *Patient-derived organoids to identify novel therapeutic targets in EGFR-driven lung adenocarcinoma.* OSR Retreat 2023, Baveno, Italy. Poster Presentation by Virginia Guzzeloni

Foggetti G, Li C, Cai H, Hellyer JA, Choi J, Wurtz A, Homer R, Gettinger S, Wakelee HA, Petrov DA, Winslow MM and Politi K. *Role of the KEAP1 pathway in modulating sensitivity to tyrosine kinase inhibitors in EGFR-driven lung adenocarcinoma.* EACR Virtual Congress, 2021. Oral Presentation

Foggetti G, Li C, Cai H, Hellyer JA, Choi J, Wurtz A, Homer R, Gettinger S, Wakelee HA, Petrov DA, Winslow MM and Politi K. *Role of the KEAP1 pathway in modulating sensitivity to tyrosine kinase inhibitors in EGFR-driven lung adenocarcinoma.* Lung Cancer SPORE Workshop (virtual), 2021. Oral Presentation

Foggetti G, Li C, Cai H, Hellyer JA, Lin W, Ayeni D, Hastings K, Choi J, Wurtz A, Andrejka L, Maghini DG, Rashleigh N, Levy S, Homer R, Gettinger S, Diehn M, Wakelee HA, Petrov DA, Winslow MM and Politi K. *Genetic determinants of EGFR-driven lung cancer growth and therapeutic response in vivo.* YCC Trainee Colloquium (virtual), 2020. Oral Presentation

Foggetti G, Li C, Cai H, Lin W, Ayeni D, Hastings K, Andrejka L, Maghini DG, Homer R, Petrov DA, Winslow MM and Politi K. *Genetic determinants of EGFR-driven lung cancer growth and therapeutic response in vivo.* AACR Virtual Annual Meeting, 2020. Oral Presentation

Foggetti G, Ottaggio L, Fronza G, Masini M, Masiello P and Menichini P, *Induction of autophagy by mutant p53-targeting molecules in cancer cells*. FISV National Congress XIII, 2014, Pisa, Italy. Oral Presentation

Targeted therapies based on oncogenic driver alterations have improved the survival of cancer patients. However, heterogeneity of drug responses and emergence of resistance remain critical challenges in the field. Thus, **there is a critical need to study the biology of these tumors to define better treatment strategies for subgroups of patients who do not benefit from standard therapy.** My Laboratory mainly focuses on understanding the mechanisms that modulate therapeutic response in *EGFR* mutant lung adenocarcinoma. The goal of my research is to generate patient-derived models of lung adenocarcinoma to identify subsets of tumors that may need additional interventions. My team and I combine these unique systems with an innovative mouse model of *EGFR* mutant lung adenocarcinoma that enables to investigate the molecular and cellular changes that underlie cancer initiation, progression, and drug response within the tumor microenvironment. By correlating our findings with clinical data, **we aim to uncover potential biomarkers of reduced therapeutic sensitivity to develop new strategies**. Our close interaction with our clinical colleagues creates the potential for our findings to ultimately inform clinical trials towards a personalized medicine for patients with lung cancer.